

Imaging of Debris Disks in the Far IR

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Evidence for planetary systems comes from detection of debris disks around main sequence stars. Around M-type stars, radiation of the cold dust in debris disks peaks in the Far IR (100–250 μm), but this is also where the confusion from high z luminous IR galaxies peaks and, consequently, limits sensitivity to the primary target. We simulate data and test an algorithm to enhance the detection of the low brightness surface expected for a debris disk in the presence of the background of point source-like galaxies. We apply this method to the Herschel bolometer arrays and the future SAFIR mission.

